

REMARKS

Claims 1-23 are pending. Claims 1-23 are rejected. Claims 1, 7, 9, 10, and 11 are currently amended, claims 5, 6, and 12-23 are canceled, and claims 24-25 are new. Applicants submit that all amendments and new claims are fully supported by the disclosure and that no new matter has been added. Applicants traverse these rejections and respectfully request reconsideration of the rejected claims in light of the above amendments and following remarks.

Claim Rejections Under 35 U.S.C. §103

Claims 1-23 are rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent 4,281,725 to Runk ("Runk"). Applicants respectfully traverse these rejections.

Runk fails to disclose, suggest, or provide any likelihood of success of a slot formed in the base of a spearhead assembly for a tool passed through a drill pipe, where the slot receives a proximal end of a spearpoint. Runk discloses a cylindrical portion 43 of a base having a slot through which a pin 55 extends (see col. 4, lines 27-41) to permit limited axial movement of the spearhead base. However, the slot does not receive the spearpoint. Rather, the spearpoint subassembly 49 of Runk is coupled to an end portion 45 of the base 43 by a pair of legs 50a that extend on opposite sides of the end portion 45.

Runk fails to disclose, suggest, or provide any likelihood of success of a base of a self-centralizing spearhead assembly having a first surface portion lying in a first plane perpendicular to a longitudinal axis of the base. Runk also fails to disclose or suggest a slot formed in the base and opening onto the first surface portion, and a spearpoint extending perpendicular to the first surface portion when it lies parallel to the longitudinal axis. The aforementioned physical features of the first surface portion and the relationship between the first surface portion, the slot, and the spearpoint are neither disclosed nor suggested in Runk. Instead, Runk discloses a longitudinal axis of the base 43 coincident with a longitudinal axis of the outer core barrel assembly 12, as shown in FIG. 1. Even if it was argued that a "shoulder" formed by a step decrease in diameter between the base 43 and the intermediate portion 44 forms a first surface

portion lying in a first plane perpendicular to the longitudinal axis, Runk still fails to disclose or suggest a slot opening onto the surface portions (e.g. the first surface portion).

Finally, Runk fails to disclose, suggest, or provide any likelihood of success of a *self-centralizing* spearhead assembly, which arises from a combination the first surface portion lying in a plane perpendicular to the longitudinal axis, the second surface portion lying in the second plane inclined at an acute angle to and contiguous with the first plane, and the spearpoint being configured to contact the inner surface of the drill pipe prior to pivoting through an angle θ from the longitudinal axis.

Applicant respectfully submits that all claims are patentable over the art of record, and respectfully request a Notice of Allowance.

CONCLUSION

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment. The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of this patent application.

Please apply any charges or credits to deposit account 06-1050, referencing Attorney Docket No. 18865-002US1.

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Respectfully submitted,

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